Special Session Two. *The North American Model of Wildlife Conservation: Contemporary Context and a Vision for the Future*

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Introduction & Overview

Today's session is part of a process that was initiated at a special session in the 2022 North American Wildlife and Natural Resources Conference in Spokane, cochaired by Gordon Batcheller and Lane Kisonak. The purpose is to fulfill a recommendation from the 2012 Technical Review of the North American Model of Wildlife Conservation, published by The Wildlife Society and the Boone and Crockett Club, for a decadal review of the Model's principles (Organ et al. 2012). A working group was formed to guide this process (Table 1).

Table 1. Working Group Members.

- Ann Forstchen (Relevancy Specialist, Wildlife Management Institute)
- Charlie Booher (Alumnus, University of Montana Boone and Crockett Program and Watershed Results)
- Gordon Batcheller (Executive Secretary, Northeast Association of Fish & Wildlife Agencies)
- John Organ (Scientist Emeritus, U.S. Geological Survey)
- Joshua Millspaugh (Professor of Wildlife Conservation, University of Montana Boone and Crockett Program)
- Lane Kisonak (Chief Legal Officer, Association of Fish & Wildlife Agencies)
- Mateen Hessami (Wildlife Biologist, Wyandotte Nation, University of British Columbia)
- Shane Mahoney (President and CEO, Conservation Visions)
- Lydia Parker (Executive Director, Hunters of Color)
- Jennifer Psyllakis (Director, Wildlife and Habitat Branch, British Columbia Ministry of Forests, Lands, Natural Operations and Rural Development)

Last year's presentations are summarized below.

Origin and Purpose of the North American Model of Wildlife Conservation

John Organ and Shane Mahoney

The North American Model of Wildlife Conservation (the Model) is a set of principles encoded in law and policy that collectively distinguish wildlife conservation in the United States and Canada from other forms worldwide. It is also one of the most misunderstood and misrepresented concepts in the wildlife conservation institution today. It too often has been transmogrified and even weaponized in popular discourse, policy debates, and published literature. The purpose of this presentation is to clarify for the record what the Model is and is not, although we harbor no delusions that inappropriate representations will cease.

The Model is based on seven principles:

- 1) Wildlife resources are conserved and held in trust for all citizens.
- 2) Commerce in dead wildlife is eliminated.
- 3) Wildlife is allocated according to democratic rule of law.
- 4) Wildlife may only be killed for a legitimate, non-frivolous purpose.
- 5) Wildlife is an international resource.
- 6) Every person has an equal opportunity under the law to participate in hunting and fishing.
- 7) Scientific management is the proper means for wildlife conservation.

The Model concept was created by Valerius Geist during his tenure as chair of the faculty of environmental design at the University of Calgary. Geist was born in Ukraine when it was part of the Soviet Union and emigrated to Austria when he was a young boy. He emigrated to Canada as a young man, eventually earning a Ph.D. from the University of British Columbia, publishing groundbreaking research on the evolution and behavior of mountain sheep, and joining the faculty at the University of Calgary. Geist's extensive global experience as a wildlife scientist, combined with his Ukrainian, Austrian, and Canadian upbringing and citizenship, gave him firsthand knowledge of various continental and national conservation programs and policies. The Model concept evolved in Geist's thinking and writing over many years as he pondered how the continental successes in restoring wildlife in North America differed from other forms, particularly those in Eurasia. An early iteration of the concept described public ownership of wildlife and three additional policies as the basis for the "North American system of wildlife management" (Geist 1988). Geist stated:

The North American system of wildlife management is unique in that, with few exceptions, it makes the public both *de jure* and *de facto* owner of the wildlife resources. ... North America's wildlife conservation is based on three primary policies that support the superstructure of laws, regulations, beliefs, and attitudes pertaining to conservation. These policies are: 1) the *absence* of a market in the meat, parts, and products of game animals, shorebirds, and songbirds; 2) the allocation of the material benefits of wildlife *by law* rather than by the marketplace, birthright, land ownership, or social position; and 3) the prohibition on *frivolous* killing of wildlife.

To public ownership and these three principles, Geist (1995) later added a fifth principle under the title "North American policies of wildlife conservation" that stated: "Wildlife is an international resource to be managed cooperatively by sovereign states." A sixth principle—"science is a proper tool for discharging management responsibilities"—was added by Geist (2000a) in a subsequent paper on conservation successes. Geist (1995) named science and an integrated approach (foreshadowing ecosystem management) as important foundations for natural resource policies, but thought those conditions were only partially realized at that time. The first paper to formally refer to these principles as the North American Model of Wildlife Conservation added as the seventh principle the "democracy of hunting" because both Aldo Leopold and Theodore Roosevelt identified "democracy of sport" as a factor that distinguished wildlife conservation in North America from that in Europe (Geist et al. 2001). The term "model" was used to mean an example or representation, not a predictor or formula.

The Model was never intended to capture the full suite of policies and practices that characterize conservation in Canada and the United States. Rather, it identifies those rooted in treaty, law, and broadbased policy that, in combination, represent a unique North American approach. For example, the Model has often been criticized for not having explicit reference to the establishment of parks and refuges these are not unique to North America and, unfortunately, are not provided for in broad-based law that supersedes destructive uses of land. Indeed, Leopold's admonishment in 1943 that we shall achieve conservation when and only when the destructive use of land becomes unethical—punished by social ostracism—is a harsh reminder today, 80 years later, that we have yet to elevate habitat conservation to a principle unique in the world in that it supersedes other uses.

Quite often, one hears reference to the Model as "archaic" while expressing sentiment that it must be revised or reinvented. Reinventing a history that is self-evident in law and policy is a dubious venture and serves no practical purpose in wildlife conservation. We cannot go back in history and relinquish treaty and law. What purpose would be achieved by removing wildlife from the trust of government for the benefit of citizens? What benefit would arise from removing legal protections for wildlife? Do we not want the best scientific information used in executing wildlife policy? Would we maintain popular support for wildlife conservation if only the privileged and elite had legal access to wildlife? Often, we have seen the user-pay/public-benefit funding mechanism in the United States erroneously equated with the Model; the seven principles do not pertain to funding, in part, because Canada and the United States have quite different funding approaches. Furthermore, funding, rather than representing a principle, is purely a means to implement policies. It is true that the narrower the funding base, the more limited the application of principles and policies, often directed disproportionately towards game species. This represents a cogent argument for more and broader-based funding, as the Model is not, as many allege, game-centric, and most principles have application to all taxa.

Today, we will hear a very thoughtful, well-formulated approach to indigenizing the Model. The absence of traditional ecological knowledge in formulating the major laws and policies that grounded North American conservation in the late 19th and 20th centuries represents a failure of our predecessors in recognizing, acknowledging, and incorporating the traditions, experiences, and knowledge of Native peoples, whose cultures have been intertwined with wildlife—the Others—for millennia on this continent. We encourage the Native American Fish and Wildlife Society and other indigenous-based organizations to document the principles that represent the conservation ethos of Native and First Nation peoples, and we encourage policymakers to heed them.

Modifying the Model to incorporate these and other principles serves no functional purpose, however. The Model, you see, is not in itself a legal maxim that directs the daily tasks of wildlife conservation authorities. As stated earlier, it is purely a concept identifying the key legal and broad-based policy initiatives that collectively were unique to Canada and the United States, that helps us understand how we on this continent achieved such success in conserving and restoring wildlife relative to other continent's approaches. Each one of the principles is codified, but the collective body—the Model—is not.

What, then, is the purpose of the Model, and what benefits can it provide? First, it enables us to recognize and celebrate the great conservation achievements of the 20th century. Second, it offers focal points as dynamic social, economic, and environmental forces continue to present conservation challenges. Is there ongoing or punctuated erosion or threats to any of these laws and policies? Do we need to be diligent in shoring up fissures in these policies? Third, and most importantly, in the face of current and emerging challenges, it exposes gaps that enable us to identify new broad-based legal and policy initiatives that will be needed if we are to conserve our natural heritage for future generations on this continent. This does not mean fixing the Model. It means that we, the wildlife conservation institution, need to bear down as our ancestors did and face these emerging challenges head-on, incorporating diverse perspectives, traditional ecological knowledge, and the great scientific advances we have developed to introduce novel legal mechanisms and the public support necessary to enact them in

order to achieve conservation. Wildlife professionals and policymakers need to understand such fundamentals as the public trust doctrine and the critical role that eliminating wildlife markets served in the restoration of North American wildlife. Why? Because professionals and policymakers will be (and already are) confronted with initiatives to alter these policies. Most importantly, comparing the challenges of the past to those now emerging helps envision what bold new initiatives may be needed to ensure a continent rich in diversity of wild animals and wild places.

The Model, in enabling us to look back and celebrate our achievements formed during a time of seemingly insurmountable barriers, demonstrates that, yes, we can go forward and secure wildlife for the future.

Critiques of the North American Model of Wildlife Conservation

Charlie Booher and Joshua Millspaugh

Critiques and commentaries on the Model have become more frequent in recent years. Statements about the Model tend to reflect current wildlife conservation policy, and conversations surrounding the Model have the potential to impact wildlife policy. Critiques of the Model fall into three categories:

- 1) The Model is missing critical components.
 - a. The Model's geographic scope is not appropriate.
 - b. The Model does not adequately synthesize salient laws and policies.
 - c. Some tenets of the Model are selectively implemented or not universally applied.
- 2) The narrative origin of the Model is biased.
 - a. The origin story of the Model perpetuates a white, male, hunter-centered narrative in conservation.
 - b. The Model does not represent or acknowledge indigenous perspectives or systems of governance.
 - c. The Model perpetuates settler colonialism.
- 3) The Model negatively affects the formulation or implementation of wildlife policy.
 - a. The Model overemphasizes hunting, giving these interest groups greater decision-making power.
 - b. Science does not always inform wildlife policy.
 - c. The Model only serves game species.
 - d. The implementation of the Model is exclusionary of certain stakeholders or creates conflict among stakeholders.
 - e. The Model hinders the advancement of novel systems of wildlife management.

The key takeaways from this presentation are the existence of a general misalignment between the definition of the Model and its application. The most prevalent critiques focus on the narratives surrounding the Model. These critiques, however, expose gaps and vacancies in the policies and practice of wildlife conservation.

Gaps in the Model and Emerging Challenges

Lane Kisonak and Jonathan Karlen

The problems addressed by the 19th- and 20th-century conservationists commemorated in the Model are now eclipsed by the problems of the 21st century—climate change, the biodiversity crisis, habitat loss, invasive species, zoonotic diseases, and others. The Model lacks interactivity with such problems; includes no discussion of federal statutory authorities such as clean air and water frameworks; and does not reflect emerging focuses on agency relevancy and R3, the role of legislatures, commissions and boards, or ballot initiatives relative to professional agencies.

Major themes identified are:

- 1) The magnitude and variety of modern conservation and environmental challenges.
 - a. *Climate change*. Extreme climate conditions are placing physiological stress on wildlife, along with changes in wildlife range, movements, and life history. Additionally, the prevalence of vector-borne diseases is increasing.
 - b. *Habitat loss.* There are mismatches between conserved land and wildlife habitat, as well as limited pathways for long-term conservation of private lands at risk of development.
 - c. *Invasive species*. Invasive species of fauna and flora pose a significant threat to our natural heritage.
- 2) Confusion between the Model and the American System of Conservation Funding. Even though the Model is distinct from the American System of Conservation Funding, it is often treated as entwined with it. The Model is mute on funding because funding, in the context of the Model, is purely a means to implement conservation policies, and Canada and the United States have different funding mechanisms.
- 3) Emergence of contemporary markets for wildlife. The Model identifies the elimination of markets for game, shorebirds, and songbirds as a key principle in North American conservation. Markets for other taxa, such as herpetofauna, have emerged along with high-fence hunting operations that promote a market for dead wildlife. Fee-based hunting promotes a market for access to wildlife. Land use decisions, mostly beyond the control of wildlife agencies, limit and eliminate access to wildlife.
- 4) The role of legislatures, commissions, and ballot initiatives in making policy. Trustees legislatures, boards and commissions, and political appointees—are responsible for major wildlife policymaking. The dynamics between the trustees and the trust managers—the professionals who staff state and federal wildlife agencies—vary. Scientific expertise, both biological and social, is the domain of the trust managers. Trustees are often influenced by external pressures and interests and may not give science adequate weight in their decisions. Ballot initiatives, also termed direct democracy and dangerous democracy, circumvent the policymaking process and can result in what Tocqueville (1956) termed the tyranny of the majority (Sabato et al. 2001).
- 5) Legal, procedural, and political aspects of science. The Model principle stating science is the proper tool to discharge wildlife policy stems directly from the Roosevelt doctrine as articulated by Leopold (1933). In essence, this means that, once policy is made, wildlife professionals will use the best science to implement it. Yet, science has a role in policy formulation, as well, and is increasingly contested and litigated in the courts. Science, once the arbiter and honest broker, is increasingly politicized (Pielke, Jr. 2007).
- 6) Inconsistencies and gaps in the public trust doctrine. The public trust doctrine resides in common law with proximate roots in an 1842 U.S. Supreme Court decision, but every state has its own version in constitutional or enacted law. These vary greatly in scope and have not always held up when wildlife ownership has been contested in the courts (Batcheller et al. 2010).

Indigenizing the North American Model of Wildlife Conservation

Mateen Hessami

This presentation was based on a published article of the same title (Hessami et al. 2021). The Model is a retrospective analysis identifying seven principles considered unique to Canada and the United States. The architects of wildlife conservation laws and policies in the late 19th and 20th centuries did not explicitly incorporate indigenous knowledge. Whether they implicitly drew upon indigenous traditional ecological knowledge is unknown but is a fertile field for inquiry. Nevertheless, the lack of indigenous knowledge in wildlife policy is a major shortcoming and should be explicitly incorporated moving forward. This requires education, indigenous representation, and building upon successful models and case studies.

The Model's Future

Shane Mahoney

The Model is a conceptual framework that evolved out of crisis—i.e., the overhunting and extermination of wildlife on the North American continent. There has been much dialogue and diatribe associated with the Model, but this discourse has not adequately settled on a key point: do we agree on the overarching principles of the Model? Rather than debating a historical construct and seeking to modify what posterity has laid in law and policy, we will be better served by focusing on what laws and policies we need to address current and emerging threats. The Model can be a launching point to learn from our history, including our successes and failures, and to ensure we have the legal bedrock to safeguard the future of wildlife on this continent.

Today's Session

Our session today brings together leaders of major conservation organizations to provide their perspectives on how the Model relates to or guides their missions and operations. This process that was launched one year ago will culminate in a symposium at the 2023 Annual Conference of The Wildlife Society in Louisville, Kentucky, in November. We anticipate a series of publications forthcoming. It is our hope that this effort will be a springboard that catalyzes the wildlife conservation community to follow up on the impactful 1930 American Game Policy and 1973 North American Wildlife Policy and provide the vision necessary for a new, current North American wildlife policy (Leopold 1930; Allen 1973).

Perspectives on The North American Model

Boone and Crockett Club

Simon Roosevelt

In 2001, when Valerius Geist, Shane Mahoney, and John Organ published their paper coining "the North American Model," they claimed that hunting led—and that hunters drove—the development of the Model's seven components. The authors considered, briefly, whether the Model and its success would carry on without hunting.

Hunters rightly feel the pride of association with the success of American conservation to date, but the important questions about the future are who will carry it forward and how. It is already obvious that conservation's future will not be determined by hunters and hunting. It may be that the future of hunting itself will not be guided by hunters, depending on whether hunting continues to be—and to be seen as—a driver of and contributor to conservation.

Conservation is already bigger than wildlife and certainly bigger than game wildlife. This is not only because the meaning of conservation became fluid in the politics of environmentalism. It is because many more people are involved, want to be involved, and want to pursue a greater variety of wise uses of nature.

Our discussion today is about far more than the North American Model of Wildlife Conservation—or should be. It should be a reappraisal of conservation. The entire subject is different now than 20 years ago. It was different then from what it was in 1973, when this conference considered the "Report of the Committee on North American Wildlife Policy." In that year, conservation was different than what it was in 1930, when this conference considered "A Proposed American Game Policy."

The evolution from game policy to wildlife policy to wildlife conservation must continue to all conservation. The need is obvious in the bastions of the original game policy—the state wildlife commissions. Our commissions represent the centrality of hunters, hunting, and game wildlife to what the entire continent has achieved in conservation. They embody the responsibilities of the public trust, the rule of law based on science, and the democracy of hunting. And that is no longer good enough for

everyone. At least seven states, including Missouri, have changed or are considering changes to the composition and function of their state wildlife commissions. Others include Maryland, New Mexico, Washington, Georgia, Nebraska, and Michigan.

The common theme is that hunters alone are no longer the drivers of wildlife conservation. Hunters should not be surprised. We accomplished much for wildlife and the broader concerns for forests, waters, and unique and scenic places in America. But others preceded us and still more have engaged since.

The entire community is concerned with the same fundamentals, and in these basic pieces of conservation, we find the specific ideas of a 2023 reconsideration. The conservation future depends on how we fund and execute the conservation discipline and how we resolve conflicts along the way.

First, funding. The 2001 paper does not address this explicitly, but wildlife held in public trust implies public funding and philanthropy, which is mainly what we have. But more money is available— and we need it. Markets driving ecological wealth have emerged since the markets were eliminated that were draining it of meat, parts, and products of game animals. Willingness to pay is a powerful force that can be directed at conservation.

The Pittman-Robertson and Dingell-Johnson excise taxes are a special case of a regulatory market. True regulatory markets, such as the wetland mitigation market, fund conservation. The U.S. Fish & Wildlife Service is drafting a new regulation like this for wildlife. There are also true markets. Carbon markets in the U.S. are not means of complying with regulations—at least not yet. Fee-access for hunting, fishing, and other expeditions are markets. Markets pay for conservation when the proceeds reward productive habitats, populations, and the work they require. We can use more of them.

Second, execution. We act mainly through prohibitions on harmful activities and permission for others. These modes took over fairly recently. In the early days of restoring game species—and let's not forget, eliminating predators—there was no National Environmental Policy Act or Endangered Species Act.

In our zeal to prohibit destructive activity, we have also restricted helpful activity. The price of precautious planning, analyzing, and disputing decisions is lost time and lost ability to measure results. We know less about what happens than what we think will happen. We move slowly to build a lower carbon energy system.

Perhaps we are better off restricting the upfront "hard look" requirements of environmental policy to actions of high risk so we may move faster and learn more from the others. At least, we must better understand the results.

Third, conflicts. Conflict is inherent in the principles of public trust and allocation by law. But democracy—the most reliable means of resolving conflict—operates at a far reach from most conservation conflicts.

Our problems are differences in opinion, not science; and yet, in the name of science, we have made technical staff into decision makers. They preside over options that all have sound scientific bases but are viewed differently by people who are risk averse or keen.

In most federal decisions, advocates must appeal to political appointees high above the decision maker or, even farther away, to Congress. State wildlife agencies, by comparison, are governed more directly with policies decided by appointed commissions.

When we say "science" should be the "determining" factor, I think we mean that science should inform a democratic choice among qualified options. If people were more directly involved in decisions, we would have better decisions and less litigation.

Funding, execution, and conflicts form a basic structure of conservation. The entire conservation community can relate to these, whether or not they have heard of or care about the North American Model of Wildlife Conservation. Looking here for our needs for improvement, we can see to the heart of our common cause beneath the constructs of the past.

Native American Fish and Wildlife Society

Julie Thorstenson

Good morning. My name is Julie Thorstenson. My Lakota name is Woksape ki Gluha mani Winyan. I am Lakota and a citizen of the Cheyenne River Sioux Nation in North Central South Dakota. I am the executive director of the Native American Fish and Wildlife Society. Thank you for the opportunity to speak today. I'm happy—very happy—to be here.

When Gordon asked me to speak on this panel and posed the question of "how the North American Model's principles guide or influence my organization's mission and actions," I thought: well, this will be really quick. I don't think I've ever heard any real discussions about the use of the Model within tribal fish and wildlife management. Of course, I don't speak for all 574 federally recognized Tribes. So, my comments are based on my own experiences serving as a wildlife biologist for my Tribe and discussions with my staff.

I haven't spent near the amount of time researching the Model as Mateen Hessami, but basically my understanding is that the Model was a response to overuse and overhunting by nonnatives and based on concepts that were prevalent during the era—an era that largely excluded Native Americans in conversations.

The early 1900s were the Assimilation and Allotment Era for Tribes (an effort to bring Native Americans into mainstream society by changing their customs, dress, occupations, language, religion, and philosophy). During this time, we were basically fighting for existence as our entire way of life and ways of living were changing. Native Americans in the United States did not become U.S. citizens until 1924. The Merriam Report helped shed light on how terrible the U.S. "Indian Policy" was working, and in 1934, the Indian Reorganization Act—or the "Indian New Deal"—was passed with the intent to help American Indians govern themselves, retain their tribal reservation lands, and become economically self-sufficient. That was three years before the Pittman-Robertson Wildlife Restoration Act was passed, and as we all know, Tribes were excluded.

Sport hunting is not a Native American concept; unfortunately, we were negatively impacted by it. There are countless examples of killing wildlife as a method to basically starve the Native people into submission. I am most familiar with the decimation of bison populations by over-hunting/sport hunting. General Philip Sheridan stated that bison hunters did more to defeat the Indian nations in a few years than soldiers did in 30 years (Madsen, n.d.). Colonel Richard Dodge, stationed in the Black Hills, wrote in 1867: "Every buffalo dead is an Indian gone" (Phippen 2016).

In general, Native American people do not view themselves separate from the world around them. They are *part of* the ecosystem, while the Model view is one of external managers. Many of our creation stories center on wildlife; for the Lakota, the center of our creation story is the bison, and it is humans who are the weakest and most pitiful. The animals take pity and offer themselves to us.

The Lakota have seven common values:

- 1) Humility
- 2) Generosity
- 3) Respect
- 4) Honesty
- 5) Prayer
- 6) Wisdom
- 7) Compassion

So, it's this value system that's more at the heart of tribal management. It's these concepts and values that influence my way of managing my time as a wildlife biologist. However, we *are* influenced by the Model. Mr. Romero, a citizen of Pueblo of Laguna and the Native American Fish and Wildlife Society deputy executive director and a retired special agent for U.S. Fish & Wildlife Service, summed it

up really well for us. He said, basically, Tribes were forced into using regulatory-based natural resource management practices due to overexploitation by other nonnatives. Whether this currently follows the Model is up to interpretation. But all natural resource laws are regulations (no matter when enacted) and are a direct effect of taking more than what is needed. I think we can all agree that imbalances that have been created and will be created have to be addressed collectively through co-management. Is the Model the best way to do this?

The atmosphere for working together is improving. There's still a long way to go for equity and inclusion of Tribes in the conservation world. However, I see this as an opportunity to build on the momentum of recognizing things such as traditional ecological knowledge and co-management.

And now I offer a very basic review of the Model's seven tenets and my perspective as a Native person:

- First, wildlife resources are a public trust. The indigenous view would be more of seeing wildlife as relatives, not resources. Just the wording alone changes how you view wildlife.
- Second, markets for game are eliminated. Honestly, marketing is bartering and that is part of our traditional economy. We traded and that's how we interacted with each other.
- Third, allocation of wildlife is by law—unfortunately, laws that typically didn't include Tribes.
- Fourth, wildlife can be killed only for a legitimate purpose. I agree with this concept 100%; this concept has existed in Native American cultures for time immemorial. Let me give you a couple of examples based on Lakota: Eagles are seen as very sacred. They are the messengers of our prayers and take our prayers to God, tunkasila; and so, we are not to kill eagles. Neither do we kill porcupines. They are slow and easy to kill, so we only kill porcupines during very, very hard times because that is when they give themselves up. But we do not take advantage of them otherwise.
- Fifth, wildlife is considered an international resource. Again, resource versus relatives.
- Sixth, science is the proper tool to discharge wildlife policy. I think we agree on that, but it must include all types of science and ways of knowing, such as traditional ecological knowledge. Our Alaska board member Orville Huntington often says: "Science is science." Western science and traditional ways of knowing are simply just a way of looking at things differently.
- Finally, seventh, the democracy of hunting is standard. But we must include Tribes in these conversations.

So, with that, I thank you.

Orion - The Hunter's Institute

Phil T. Seng

For those not familiar with Orion - The Hunter's Institute, it's important to note at the outset that we have two primary goals:

- 1) Improving the image of hunting with an emphasis on fair chase; and
- 2) Putting hunters at the forefront of our nation's conservation ethic.

Orion exists to protect the future of hunting by promoting fair chase and responsible hunting and by providing leadership on ethical and philosophical issues that pertain to hunting.

We call ourselves The Hunter's Institute because our mission is to be thought leaders and facilitators in the pursuit of open and honest discussion, debate, and consensus building for the benefit of hunting. We strive to provide a forum for this discussion, and we often ask difficult questions to encourage hunters to reflect deeply on the "why" of hunting in their own experience.

Within our own board, we often have differences of opinion—indeed, sometimes deep divisions regarding the "why" of hunting and/or the best path forward, reflecting quite well the monumental complexity of hunting across the continent and the diversity of viewpoints surrounding it.

The Model certainly falls squarely in the center of our crosshairs, and one or more of its principles nearly always come up at our meetings and discussions. The Model is much broader than just hunting, of course; although, there have been many efforts to try to constrain it or co-opt it to support a variety of specific purposes—including hunting. Orion rejects those attempts in favor of the broad, original intent of the Model; but fair warning, we are a fair chase hunting organization, so our perspective is clearly biased in that direction.

Each of us panel members was asked to address how the Model guides or impacts our respective missions. While Orion embraces all of the Model's principles, three of them are central to Orion's mission:

- 1) Wildlife is a public trust resource.
- 2) Wildlife can only be killed for a legitimate purpose.
- 3) The democracy of hunting.

Here is a quick look at these principles through Orion's eyes.

Wildlife is a public trust resource. Public ownership of wildlife is one of the truly great legacies of the North American experiment. It has brought about a variety of benefits, but chief among these is that it has fostered a vested interest among the public for the *conservation* of wildlife as assets to be held in trust for and on behalf of everyone, to be managed unimpaired in perpetuity. Hunters historically have had a prominent role in conservation advocacy precisely because of their vested interest in sustaining healthy and productive wildlife populations. This common ownership and the resulting vested interest stemming from it has fostered the principles of fair chase and other responsible hunting practices to guard against abuse of the public trust resources—to safeguard against the tragedy of the commons. With precious few exceptions, it has been a rousing success for decades. Across the continent, hunters harvest large numbers of animals without depleting the resource—a great *success* of the commons, rather than a tragedy.

However, there is an ongoing and, we believe, accelerating erosion of this public trust principle. In some places, it's outright open war in the form of policies and legal challenges by private and commercial interests who seek a privileged status in the allocation and access to wildlife such as license set-asides. But in other situations, it wears camouflage and lurks largely outside the public discourse. For instance, in eastern states where the vast majority of the landscape is privately held, what would happen if all of the landowners put up fencing and restricted or prohibited access—to people and to many wildlife—across their borders? How would wildlife remain a public trust resource? Relatively few people across this continent deny or even begrudge landowners their private property rights, but taken to its logical conclusion, the ultimate end of this "straw dog" argument is still the "locking out" of people who do not have access—the reduction of the resource to a private trust, not a public one. Should society intervene in this circumstance? Across the continent, we bear witness to how common interests are colliding with private interests. How do the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public trust resources compare to the values and benefits accrued by public tru

Wildlife can only be killed for a legitimate purpose. Social science research has shown over and over that a healthy majority of North Americans accept taking the lives of animals as long as it is for legitimate purposes. This is paramount for responsible hunting, which is the cornerstone of Orion's mission. We celebrate the *experience* and the *chase* of the hunt more than the kill itself, but we also celebrate the special meals, garments, trophies, memories, and other benefits that bring value to humanity and bonds among people. So what constitutes a legitimate purpose? "Aye, there's the rub!" as Shakespeare's Prince Hamlet would warn. I suspect that, like me, most hunters in the crowd would quickly point to hunting's benefits to conservation—population control, disease management, and the like. And

they wouldn't be wrong. But what happens when society finds other more efficient and effective ways to achieve these benefits? If our case for perpetuating hunting to the broader public is based solely or even mostly on its conservation benefits to society, then we will have no hoof to stand on if or when that reason goes away. It may be wiser to expound on hunting's inherent values and use the conservation benefits it provides as supporting messages when specific situations dictate.

Discussions about what constitutes a legitimate purpose often require hunters to draw lines between what constitutes hunting and, say, what constitutes killing or culling. A person may use hunting gear and hunting techniques and there may be modified regulations in place to reduce the local deer herd at a park where hunting was otherwise not allowed. Is that hunting? Where does hunting end and culling begin? And what about killing contests? Is that hunting? Do such events even constitute a legitimate purpose for killing wildlife? The list goes on: pen-raised birds, hounds for hunting bears, use of bait, to name just a few. Moreover, a method that is time-honored and revered by people in one part of the country is scorned and avoided by people in another. So who gets to decide what constitutes a legitimate purpose for killing wildlife? In the end, and it's one thing we know for sure, society will decide—not only questions about hunting, but about the whole of wildlife management and the institutions and people that do it. Thus, it is critically important for hunters and all other conservationists alike to carefully consider the optics of our activities to the uninvolved and often disinterested publics who currently tolerate them. Much more than hunting is at stake.

At Orion, we believe that open, honest discussion of these prickly issues is the first, best step toward finding the path that leads to the third principle of the Model that guides Orion's mission: the democracy of hunting.

The democracy of hunting. As Theodore Roosevelt and Aldo Leopold pointed out, this principle distinguished wildlife conservation in North America from anywhere else in the world. The privilege of every citizen in good standing to legally hunt fosters a vested interest in conserving wildlife and wild lands that is essential to biodiversity conservation. Without it, market and societal forces inevitably drive the system toward a fee-based hunting model that excludes all but the privileged few. And if market forces favor a few types of wildlife to the exclusion of others (ungulates with large antlers being the obvious, but not only, example), biodiversity suffers. Most hunters cringe at the notion of shifting to this more European approach here in North America—an approach that was detested by Roosevelt and Grinnell, by the way. And yet, the perception among hunters is that the amount of land that is posted "No Hunting"— land locked up in hunting leases and membership in private hunt clubs—is higher than it's ever been (note: I don't have any quantitative data on whether those things are true or not, but I have lots of data showing hunters perceive it that way). So, whether it's an intentional shift or simply a byproduct of circumstances doesn't really matter. If it looks like a duck and quacks like a duck, it's probably a duck.

So where do we go from here? For Orion, the privatization and commercialization of public trust resources is the biggest threat—both to the Model as well as to the fair chase hunting ideal. We also have concerns about staking the value of hunting only or even mostly on the *conservation* benefits it provides to society. Finally, and this may be the most insidious challenge to the viability of the model and what all of us in this room care deeply about, is the growing apathy and disconnect of people from wildlife, wild lands, and our wild North American heritage. None of the rest of this stuff matters if the populace simply doesn't care about the fact that the greatest gift we can pass on to our children is a continent enriched with wild animals and the opportunity they afford us to find meaningful and rewarding engagement—whether as a hunter or angler, a birdwatcher, or someone just out for a stroll.

We call on everyone who works or plays in the conservation arena to fight for keeping wildlife in the public trust, and we encourage an honest and robust discussion of all of these critically important issues among hunting interests and the wildlife conservation community at large.

Hunters of Color

Lydia Parker

I am a member of the Walker Mohawk Band of Six Nations of the Grand River. I'm also on the Department of the Interior and Agriculture's Hunting and Wildlife Conservation Council. I was honored to be asked to speak today, but to be honest, I was a little confused as well. You see, whenever I get asked to speak or share insight, I always hope to bring something new or enlightening. But I was in Spokane last year at the 87th North American Wildlife and Natural Resources Conference, and I believe my esteemed colleagues Charlie Booher and Mateen Hessami and others did an excellent job outlining issues and shortcomings surrounding the Model, and I don't feel that any of the critiques or suggestions brought up last year have been implemented or even fully explored.

So the other night, in true Winston Churchill fashion, I sat down in my bathtub to write this speech, and I asked myself: what are we doing here, talking about the same subject one year later? What's the point? And I decided that the point of any speech should be either to get something important across or to get something done—or better yet, a combination of the two.

So, I hope to do just that in the very short time allotted to me. Instead of boring you with a reiteration of last year's critiques, I'll simply attempt to briefly categorize them as John Organ did this morning; then I will attempt to offer a novel solution. Though the critiques of the Model or critiques of the application of the Model are vast and different, there are three themes that can be used to categorize them all. The first critique revolves around what is missing from the Model, or what is overlooked—sins of omission, if you will. And no, it's not a stab at the creative geniuses behind the Model. We're all sinners. We all fall short. And the fact of the matter is, we don't know what we don't know. We're all blinded by our own worldviews and axioms, no matter how learned we are, which is why diversity is so important. If we're going to have a well-rounded, inclusive thought or model, we need to ensure that it's been put through rigorous testing and questioning, like with anything in the scientific realm, chipping away at biases, conscious or subconscious.

The second set of critiques has to do with restrictions and limitations due to the application of the Model and the way it is upheld as if it was law. You see, John Organ and Shane Mahoney will be the first to tell you that the Model is nothing more than that, a model. But it has been applied as if it is the *only* model, as if it is the only way. Today, when it was simply a set of tenets put together on a bar napkin at one of these conferences years ago, and again. I don't say that to demean the Model, nor the brilliant minds behind it, but to point out that when we treat it as law rather than a model, we are restricted from implementing innovative policies that are necessary for our changing planet. If they happen to stray from the limited overview of the Model, we're restricted in how we approach conservation as a whole. For example, when we use language from the sixth tenet—science as the appropriate tool for wildlife policy, we ignore the obvious bias that precludes us from viewing traditional ecological knowledge in the same light.

Lastly, is the category of critiques involving the Model's narrative. It is simply not the full picture of conservation; conservation didn't start with Roosevelt or Grinnell or the first North American Conservation Congress. Conservation did not begin with the English and French expanding across a vast, unpopulated wilderness, as postured by the historical overview from the 2012 technical review published by The Wildlife Society.

The act of conservation, managing ecosystems, protecting biodiversity, and preserving natural resources for posterity has been going on since time immemorial. On this land, I always like to quote the late, great Oneida comedian Charlie Hill, who said that whenever there's a problem on this land that needs fixing, ask the Indians because we have the owner's manual. Traditional ecological knowledge isn't folklore. Indigenous peoples have been practicing science long before that word entered our vocabularies. We've been instituting practices that have undergone generation upon generation of rigorous testing to find what works and what doesn't. Dare I say, we've been using the scientific method and testing our hypotheses over millennia.

And yet, indigenous peoples aren't even mentioned once in the United States section of the Model's historical overview in that 2012 review and are only briefly mentioned in the Canada and Mexico sections. The U.S. section does mention the plight of the bison but conveniently fails to mention the genocidal intentions behind their near eradication, as Julie Thorstenson mentioned earlier. And indigenous science and the history of indigenous management of the land isn't the only thing that's been left out by the North American narrative. If you take a closer look at this, actual citations used when discussing the historical overview, much of what is cited is touted as a history of conservation when it is more accurately a history of the Boone and Crockett Club and other white-led conservation organizations. Therefore, it's no wonder that indigenous science or the contributions of Black Americans, women, and other groups have not been included in the Model itself.

Now you might be saying to yourself it's not as though Mahoney and Organ and their colleagues set out to write a diverse history of the United States. So why is this important? It is important because we need people of color and women to see ourselves represented in conservation because we are going to be the next generation of conservation torchbearers, and this is where I believe we can start with a novel solution. Look around the room. Do it. Who do you see? Who is represented and who is missing?

Earlier this year, I was asked to join a working group to discuss the Model's future. But before I go any further, I want to say in all sincerity that I'm super grateful for this opportunity. However, when I joined the group, I was surprised to see that the group looked an awful lot like the demographics of this room right now—rather homogeneous, if you will. When I suggested that more diversity be brought to the group, I was told that I could come up with a list of people who might fit that bill, so long as they weren't argumentative or problematic (GB1). But how else do we come to scientific truth than to challenge our own biases? Further, if we don't tell the truth about the history of conservation, the whole truth, why should groups other than white men see themselves as stakeholders or leaders in conservation? If we don't show the impacts made by communities of color and women on conservation and if we don't work towards equity in this space, we will fail ourselves, our posterity, and the planet. Therefore, my suggestion is this action from people in positions of power who are willing to delegate and share that power with those who haven't historically been at the table.

Here's what that might look like:

- 1) Let's prioritize hiring people who have been historically excluded from this discussion. As our nation becomes more diverse, conservation demands equity and hiring practices. I promise you there are diverse qualified candidates out there, and if you need help finding them, come see me up here after the session.
- 2) Let's do a study to reach out to the communities who aren't in this room to learn what the Model means to them, what it doesn't mean, and how it affects their communities, for better or for worse. I run a nonprofit with thousands and thousands of diverse members. If you can supply the researchers or the funding for this project, let's make it happen. Again, please come talk to me after the session.
- 3) And lastly, let's reinforce the current coalition of people working on the Model's future by creating a stronger, more inclusive coalition of diverse people who are willing to share diverse and adverse opinions so that we can ensure that the Model serves all people going forward.

Before I conclude, I want to let you all in on my biggest fear. Today, my biggest fear isn't public speaking, and it obviously isn't ruffling feathers. My biggest fear is that we will be in this exact same position at the 89th North American conference and the 90th and the 91st. We could come back next year repeating the same cycle of talking about what we should do; but instead, I hope we come back next year with a list of accomplishments and actions we've taken to address the issues myself and others have outlined here today.

National Audubon Society

Marshall Johnson

When we talk about the Model, we must remember that the terminology of success is narrowly defined. But that is not going to be what helps us rise to the challenges and the opportunities of creating a truly inclusive Model moving forward.

Being who I am, having the identity that I do through all my work, means managing complexities and complications, and we do that through our science work as well. But as an African American in conservation, you manage that tension. If you've read the newspapers, you know that the National Audubon Society has a lot to be proud of and a lot of soul searching ahead of us. In many ways, this is analogous to the challenges of moving the Model forward as we know it because it's building off of incredible successes of the Model. But even the terminology of building "off of" excludes people who weren't there at the founding and, as you've heard, weren't even considered citizens.

I've been asked to this effort for the National Audubon Society, where we've been going through strategic planning, and I'm proud of what the organization and its people have pulled together. It's all about birds, something I've wanted Audubon to refocus on since I started there 13 years ago. What do we want to accomplish 25 years from now? It's all about having a long and truly hemispheric vision for our work. In thinking about that and meeting with hundreds of staff members, we often referred to our "northern star" as a guiding principle, and I remember one Audubon American staff member from Colombia telling me one day: "Marshall, that northern star? We can't see it down there."

And so, think about what you do when you leave here. Embrace the discomfort—because I know we all feel it. Forge a new understanding of each other, a new understanding of what must be done, and the values and tenets we will use moving forward. There's so much to be learned from the Model, but we must create something new for the future that includes all people and communities.

Today, we may feel uncomfortable and troubled. Congressman and civil rights leader John Lewis created tension and trouble—but trouble can be good. I encourage you to embrace the tension and discomfort, and think about this when you walk out these doors: What will we each do to make sure that the rooms we work in look like the communities we need to work in?

Backcountry Hunters & Anglers

Ted Koch

When I was young, I was catching frogs in my backyard and riding my bike three miles in the dark to go fishing. I am a self-taught hunter and avid angler. I studied biology in college, and somewhere along the way, I was exposed to the ideas best captured in the later writings of Valerius Geist, Shane Mahoney, and John Organ. I became a true believer in the North American Model for Wildlife Conservation. I lived it. I respected it. I was grateful for it. But along the way I saw things that I wasn't sure reconciled, like duck on the menu in restaurants or deer antlers for sale. Just last week I saw venison jerky for sale, and at each of these instances, I wondered: Does the Model still apply?

Then, one fine summer day in the 2000s, a buddy and I were fly-fishing for salmon on the south fork of the Salmon River in Idaho—and my world was rocked. We each caught a couple of fish and had a great time. I kept my fish because my wife loves it when I bring home wild food. We took a break in midafternoon and went upstream to the weir where the Idaho Department of Fish and Game was catching adult salmon to take to the hatcheries. We watched hundreds of salmon piled up below the weir. In that quarter-mile, there were "no fishing" signs for reasons that seemed obvious to me.

As we stood and watched all those salmon, a white pickup truck drove up and parked, and a man (who I presumed to be a member of the Nez Perce Tribe, based on his appearance) jumped out. He grabbed a fishing rod the size of a pool cue from the back of his truck with a giant weighted treble hook on the end, and he went down to the water's edge, threw it out, and in about 10 minutes snagged two large fish. He threw them in the back of his pickup truck and left.

I felt two emotions—sad and sadder. Sad because he did what he did because of his heritage (I was not of that history, so we lived under two different sets of laws). I thought about some of the components of the Model, like democratic allocation and equal access to resources. But then I felt sadder because of the circumstance that both he and I were in. Salmon runs are down by more than 90% because people who are my ancestors built four dams on the Lower Snake River. The pie he and I had to share was dramatically smaller for both of us, and he didn't take any more fish than I did. He just did it in a different place, using different means. And frankly, when I reflected on the bigger picture, I was glad for him to have the opportunity to do that.

Thinking back even further, I never forget that the Wampanoag Tribe saved my family's life. My family came over on the Mayflower in 1620, and if not for the presence of the Wampanoag Tribe and the skills they had in accessing food, my family probably would have starved to death. I know there's controversy around Thanksgiving, but when my family got off the boat, they might not have survived if it wasn't for that Tribe, and I'm sure my family was thankful. Of course, we repaid the Wampanoag Tribe and Tribes across North America over the next many generations by reaping genocide. And the Nez Perce Tribe suffered, along with all the rest.

In my career as a federal biologist, I was exposed to the idea of traditional ecological knowledge (TEK) long ago, and honestly, I resisted it at first because it didn't feel like the science I'd been trained in. When I realized that *my* science and TEK are both simply different forms of ritualized storytelling, I was able to open my heart and mind and listen, and I appreciated more what TEK can represent. Today, the Nez Perce are fighting more effectively than anyone else to save Snake River salmon and steelhead, and they do it from the basis of TEK. This is very important to me. The people of my heritage took most of our salmon away, and I support the Nez Perce Tribe's efforts and am grateful for their leadership to restore them.

In a future wildlife management paradigm, I see traditional ecological knowledge as a legitimate component of how we manage fish and wildlife and how we talk about science. I am still a true believer in the Model and western scientific ways—and I'm not really sure how to fully reconcile the two—but perhaps that's for the next generation to decipher. Aldo Leopold said when we see land as a community to which we belong, we may begin to use it with love and respect. And increasingly, that's how I see all of us who love wildlife and the natural world. Backcountry Hunters & Anglers and I will align with those who put the interests of wildlife and wild places first, no matter where they come from.

National Wildlife Federation

Mike Leahy

The breadth of the National Wildlife Federation (NWF) provides a good lens for considering the North American Model of Wildlife Conservation. NWF is a federation of state and territorial affiliate organizations, collectively representing nearly seven million members and supporters from practically the full spectrum of conservation perspectives. Affiliates gather annually and establish the official positions of the federation by debating and passing resolutions. Affiliates have passed multiple resolutions supporting the Model and the public trust doctrine. They have also passed resolutions supporting federal wildlife laws, including the Endangered Species Act, Migratory Bird Treaty Act, and Marine Mammal Protection Act; supporting tribal wildlife management; addressing threats like pesticides and pollution; and promoting vigorous enforcement of wildlife laws, among many others.

Do all these and other wildlife conservation strategies fit within the Model? Should they? When I think of the future of the Model, I think of what combination of core conservation tools could not only garner the support of all NWF affiliates but also galvanize their collective enthusiasm and address all the challenges to wildlife and biodiversity they and other conservationists are trying to resolve. Conservation is experiencing the most success where it has the most support, as evidenced by recent successes in the policy sphere: establishing the first national wildlife crossings program with support from hunting to animal welfare organizations; passing multiple bipartisan "sportsmen" bills that were inclusive and

unobjectionable; and nearly passing Recovering America's Wildlife Act after broadening its base of support. How can the Model capitalize on the momentum generated by the broad interest in wildlife?

Go Big or Go Home. The Model could be a broadly unifying set of solutions. It already is to many, and many supporters seem to want the Model to be all encompassing. However, it would have to be significantly broadened—in understanding, if not scope—if it is supposed to be the tool that is universally recognized as how all species (pollinators, predators, pigtoe mussels, and right whales) are recovered and sustained across North America. It would presumably have to explicitly incorporate federal wildlife and at least some environmental laws. This risks, however, stretching the Model beyond the breaking point by tackling challenges its principles were not created for.

Go Small or Go Home. An alternative path could focus the Model's principles on what they were primarily developed for and what they do best—recover and maintain wildlife that people hunt and fish. This approach would intentionally position the Model within a broader universe of wildlife conservation strategies, rather than have it try to encompass all of those strategies. This would situate the Model in a position of strength, making it able to be easily articulated, understood, and defended in a wide range of relevant contexts, such as promoting the continued hunting, fishing, or management of a wide range of species without bearing the burden of trying to recover and sustain all species.

This would also allow energy currently invested in debating the Model to be invested in applying the Model. There are charismatic ungulates that still need recovering—woodland caribou were recently extirpated from the U.S.; bighorn sheep are under-recovered; and wild bison are barely recovered. Sportfish, including shad and salmon, need undiluted attention. And some Model successes are regressing, such as turkey and striped bass populations. Further, threats to the Model need to be addressed—i.e., privatization, unregulated commerce, etc.

Provide a Purpose. The Model was written as a retrospective summary. A forward-looking, solution-oriented Model would need a purpose. People can be forgiven for thinking that the purpose of the Model's principles is to recover all of North America's wildlife populations, but the Model is not consistently applied to benefit all wildlife, calling its efficacy and integrity into question. Clarifying a purpose would resolve this.

More Biologists is More Better. The Model is too often associated with jurisdictional preferences. Yet, important wildlife work is done by professionals at institutions of all types and levels—state and federal wildlife agencies; land, agriculture, transportation, and research agencies; Tribes; nonprofits; businesses. Redundancy in coverage insulates wildlife from the vicissitudes of democracy and funding at the state, federal, and other levels. If this coverage and redundancy is not explicit in the Model, it should at least be celebrated in its application.

Wildlife Centric. All strategies that benefit wildlife, and are generally acceptable to wildlife supporters and society, deserve a place in the Model, or alongside it, particularly given the scale of threats now facing wildlife.

Taxa Neutral. Every species to which the Model is applied deserves the best the Model has to offer. Each principle should be applied with equal vigor to each species, to the extent relevant. Disparities in how the Model is applied to different taxa create disillusionment with the Model, which leads to divisiveness when Model proponents oppose well-intentioned efforts to make the Model work for nongame species, predators, and herps.

Coarse & Fine Filter—of Policy. The Model provides powerful, crosscutting principles for conserving wildlife—a coarse policy filter. The Model is undermined when those principles are not applied to, or successful at, maintaining the wildlife they are supposed to benefit. The decline of

individual species calls into question the efficacy of the Model, and proponents should invest energy in ensuring all species covered by the Model are recovered.

North American Model, Canadian-American Model, or...? The name of the Model is unintentionally divisive, including because it is not comprehensive or inclusive of legitimate wildlife strategies in Canada and the U.S., much less countries south of the U.S. The name should be narrowed to reflect the subset of conservation the wildlife community focuses the Model on, going forward. Alternately, the Model could be broadened to encompass the full suite of legitimate conservation approaches employed throughout the continent. The broader the Model is, however, the greater the differences among countries will be, which is an argument for narrowness or identifying sub-models representing individual country's unique strategies.

A World of Policy Wounds. Aldo Leopold (1987) famously said: "One of the penalties of an ecological education is that one lives alone in a world of wounds." The same is true of a legal or policy education in ecology. The Model is regularly ignored, undermined, or worse—including by Model adherents with regard to personally disfavored species. Yet, what is done to the red wolf can be done to the elk. Model supporters could do a much better job defending the Model and insisting on its impartial application.

Crowdsourced Conservation. Wherever the professional wildlife community takes the Model, conservation is crowdsourced. Every action taken on behalf of wildlife throughout Canada and the U.S. may or may not be under the Model but *is* part of wildlife management. The extent this community can guide this constant evolution will depend in part on how inclusive and successful the Model is. The more wildlife supporters see their interests and needs reflected in the Model, the more likely they are to support it. The more successful the Model is at restoring all of America's wildlife and biodiversity—and addressing threats to both, the more likely it is to be supported. Alternatively, if the Model is refocused on its original purposes, it has great potential to continue to contribute heavily to conservation, while shepherding its core principles in a broader conservation context.

The Wildlife Society

Ed Arnett

The Wildlife Society has been deeply engaged in publishing and discussion about the North American Model of Wildlife Conservation. Our members were part of the Model's development, and we published the society's technical reviews of both the public trust doctrine and the Model.

When Valerius Geist, Shane Mahoney, John Organ, and many others were envisioning this, they may have thought of a theme song and a fitting one might have been "Don't Let Me Be Misunderstood!"

The intent of the Model has been well described by John Organ, and the needs for the future have been well described by our panelists. But I do want to cover a couple of points that are in our current Wildlife Society position statement that came out of those technical reviews.

The core tenets of the Model are sound, and it's important to understand those principles and their importance to wildlife conservation. It's also important to foster educational opportunities to increase societal awareness of the Model and the importance of its components, especially among wildlife professionals.

Now, as a scientist, I'm embarrassed to say that I'm about to share a very biased, very small sample relevant to our discussion about the Model. I teach a course on wildlife policy at Colorado State University. Throughout four years of teaching this online course, I had a sample size of 68 students. Only eleven of those students had even heard of the Model. Expanding the experiment, I asked 20 people who were fellow airline passengers about the Model—and no one had heard of it. So, we have a lot of work to do independent of changes to the original nature of the Model or future articulations of those seven key principles.

We've got a lot to work on not only within the wildlife professions and with wildlife students, but also with the public at large. The Wildlife Society supports a critical review of the Model and its application under current and future conditions. It is very important to recognize the distinctions and similarities across the North American continent.

The Model's future rests, to a high degree, on its adaptability and application of its principles to contemporary wildlife conservation needs if it is to remain viable in the future. It must remain relevant, and to that extent, the Model must be viewed as a dynamic set of principles that can grow and evolve. And to that end, The Wildlife Society most assuredly supports the identification of threats and challenges to the viability and application of the Model and, as appropriate, the use of scientific and educational resources to deter those threats.

As we stand at the proverbial crossroads of conservation, now is the time to move forward. But what does that look like and how does that become manifest? A key theme in today's plenary session came from Dave Tenney—and that is cooperation. There's no doubt we hear that word a lot, but we need to truly cooperate on this endeavor. We also need flexibility and creativity. And Steve Williams, our brand new director of finance, said something that was maybe more profound than most thought on embracing change—he stated, "I don't like change, but I do like transformation." This resonated enough with me to share that change can be scary, but it doesn't have to be.

We no longer can afford the luxury of arguing over state and federal jurisdiction and game versus nongame management. We need to be united now more than ever because we have never faced more serious conservation challenges than we do today. We have plenty of successes to celebrate, but we have too many challenges not to be more united and take a stand for wildlife. The Wildlife Society stands ready to help with that unification to keep us moving forward.

The North American Model in the Context of a First Conservation Policy for the United States, Canada, and Mexico

Shane Mahoney

As we look back on the history of this idea of a North American Model of Wildlife Conservation, it is important to reflect not only upon the dire ecological context that prevailed, but also upon the social environment in which the narrative was developed. We must also remember that this narrative is just that—a compilation of guiding principles that conservation thought leader Dr. Valerius Geist articulated a quarter century ago and which he perceived as essentially self-evident truths. It is important to recognize that Dr. Geist did not think his way to this compilation because he was tasked by a government authority to write a policy document or to draft a piece of legislation, nor did it arise simply because of academic fervor or reflection. He developed this description because he was challenged by conflicting philosophies to prove that we actually had some kind of system in North America to actively, and purposefully, conserve and manage our wildlife resources.

At that time, there was a rising movement of individuals and agencies aggressively advocating for private ownership of wildlife across this continent. While this advocacy proffered many dimensions, what became most identifiable for the general public was the concept of game ranching. This movement, in favor of essentially private capture of public wildlife for profit, was strong enough that Dr. Geist's opposition to it spurred numerous threats on his life. Under police surveillance and protection, he continued to advocate for public wildlife ownership and against privatization, which he saw as leading inevitably to a host of maladies for wildlife, including a near certain emergence of novel diseases. Was he ever right in that prediction, as we recognize now in the world of Chronic Wasting Disease.

And that, friends and colleagues, is the historical backdrop for the set of principles we are talking about here today. Maybe it's something some or most of you don't know; I'm not sure. I know only because I was with Geist at the time and because of the intense discussions we shared over many years. But I raise this history to illustrate that there are many things about how this all came about that perhaps only few of us really know in any level of detail. The outcomes, strengths, and weaknesses of the Model must be understood within the greater context of serendipity, human frailty, and limitations of knowledge.

Confusion over historical origins of all kinds is nearly inevitable. We face a fog of reality when we seek to understand the true circumstances occurring at a particular point in time. But please understand, I am not here in any way, shape, or form—nor have I ever been—to "defend the Model."

In thinking of our conservation efforts in North America, I view the Model's principles and its articulation as milestones along a continuum of circumstance and endeavor. While the Model—namely, the system of policy, laws, and institutions that gradually emerged and coalesced into a recognizable order for conservation—has proven capable of delivering enormous successes, it also, over long periods of time, has not been effective across the board. There is evidence to support both the Model's triumphs and weaknesses. It is not perfect; but what is? The truth of the matter is, though, that we have to have *something* concrete in this regard, and critics and proponents alike agree that we do have a system, for better or worse. And we must have some set of ideas, some set of ideals, some set of principles to guide our conservation imperative. In developing its recognizable system, North America has been a leading global conservation influence; and the United States, in particular, has been an innovator of almost untouchable status.

I think we can all agree that the conservation ideals we seek to enshrine and pursue must represent the best that we can bring forward as human beings—and certainly not, any longer, as human beings who view themselves as having dominion over nature, nor even as shepherds of nature. We need a transformational change in the way we approach natural things; we must see ourselves as simply part of the natural world and part of natural landscapes, just one more species with a specific ecology to pursue. I am convinced—after a lifetime in this business and with opportunities to witness the state of our natural world around the globe—that we had better get on with that job real damn fast.

I am not really interested in whose ego was, or is, tied up in the idea of an unchanging and unfailing Model—or any other construct that we have come up with over time. Nor am I overwhelmed by the logic of critics who, when pressed, cannot decide which, if any, of the Model's principles they wish to change. I'm also not particularly interested in who is offended by this position or how they might be connected to any of the many fabulous conservation institutions or organizations, old or new, that we have in North America. What I am interested in and ready to defend are the successes the Model has achieved, just as I am interested in exposing its weaknesses. What weaknesses? Well, like the need for recognition of Indigenous knowledge and the inclusion of all citizens in a truly representative public trust ideal for wildlife and its contributions to human ecology in its widest form.

What we require, I firmly believe, is to commit ourselves to *disallowing* our discussions of the Model to be constrained by a narrow bandwidth of thinking that enables us to talk only about tinkering here and tinkering there with a particular principle or a specific aspect of the Model. That is not enough for the conservation crises we are facing in this country, and in Canada, and around the world—with respect to wildlife diversity, to the integrity and connectedness of natural systems, and to the ecological fabric of this planet. This burden is a shared inheritance of all humanity. In this context I must ask: Have people, Indigenous or otherwise, ever engaged with nature without impact of some kind? Of course not; and, naturally, this has always been the case. We are but one species, and we share in a single ecology despite our enormous cultural diversity. Indigenous and non-Indigenous, we are all human. And we all can make significant mistakes in our engagements with nature or enjoy tremendous successes in our contemplations of a better way forward.

In this context, we should remember—and remind Model critics and proponents alike—that not all in the Model has *ever* been just about hunted species. The conservation fight for songbirds was led by early founders of the Model who, as we know, were among the first to speak about these species in terms of conservation and loss. These early conservation leaders did *not* see nature only as something to harvest but saw it also as something to be loved and enjoyed, inherently and for its own sake. It was Boone and Crockett cofounder George Bird Grinnell who, ultimately, founded (also) the National Audubon Society. Such broad-minded and inclusive views were desperately needed then and are desperately needed now.

Furthermore, there have been many, many arguments in support of the management of nongame species by state agencies over the years, despite what some observers may otherwise suggest. Indeed, today, nongame management programs are 50-plus years old in the United States and were long

advocated *from within* by the very agencies now frequently maligned for a blind focus on hunted species. These are realities we need to think about and acknowledge. Just as with the Model's principles, we need to ask ourselves: What do we as citizens interested in conservation really disagree on? Is it really the Model and its principles or in the way we perceive these are being applied and delivered?

Again, many people with whom I discuss and debate this Model say, "I don't like the principles; they are no longer relevant or representative." Yet, once we review the individual components, many of these detractors come around to say, "Well, I'm not really quite sure what principle I want to throw out or want to change." Similarly, Model proponents may trot out the argument of who really funds conservation programs but may then be willing to agree that wildlife is owned by us all, and that, well, recreational shooters (not hunters, per se) actually fund a very significant portion of state conservation programs today. And no one I personally know suggests that wildlife belongs to anyone but does indeed belong, like wilderness, to everyone. We should remember that the Model is not an Abrams tank, something designed to defend or be attacked in the name of conservation ideology; but is, rather, a living tapestry of human thought and concern for nature's future.

Vacancies do exist in the Model, of course, and are critical to define. There is no doubt in my mind that the fundamental vacancy in the development of the Model as we know and understand it—and as Dr. Geist and I articulated in our book—was not just the lack of Indigenous engagement in the development process but the complete and utter failure to integrate Indigenous traditional knowledge in our conservation approaches (Mahoney and Geist 2019). We articulated this point so forcefully in our book that it is impossible to read it without recognizing that being the case and without acknowledging that this remains a serious problem to solve. Yet, how we solve it may be as important as invoking the solution itself. The tortured history that envelops this issue presents a wicked dilemma for us all.

But having said all of that, it strikes me that we are off the mark slightly in these discussions of the Model, discussions that have now coursed during a two-year period. I think we've come through a long and dedicated process, yes; and I thank Gordon Batcheller and everyone else who has made all of this happen. Furthermore, this panel discussion has been a credible and impactful representation of the topic's complexity and importance. As far as I'm concerned, it was one of the best things to have happened during this process so far; so, again, thank you, Gordon and colleagues, for constantly trying to make this process better. However, I remain troubled by a repetitive thematic that runs through and almost certainly constrains our thinking; and that is a focus on wildlife species, *per se*, as the undeniable center of our endeavor. I propose that there is something more at stake.

I wish to propose that we not think about—as is teased in the proposed topic of my talk—a new wildlife policy. Instead, I propose that we broaden our horizons and discuss wildlife conservation, and the Model, in a larger conceptual framework. I believe what we need to think about, and get working on immediately, is the first North American conservation policy. And I think, within the framework of that, a broader wildlife policy for North America, one that includes Canada, the United States, *and* Mexico, from inception, may be articulated and understood. In this way, as we rethink some of the dimensions of the Model and/or its application that we want to improve, we can also reflect on them in a different light, with more air and more clarity and an enhanced modern relevance.

This does *not* mean—especially for those of us in the room who believe in the Model and its successes (which it has manifestly had)—that we need to discard or diminish any of the high points of its progress. We can indeed measure those successes and should do so on a continuous basis. They are not fictional nor outdated or irrelevant to future conservation efforts. But they do not set the upper limits of our needs for conservation necessarily, nor exclusively define the horizons of our aspirations for a new global ecological framework. To clarify what I mean, I am suggesting we view the Model as a springboard for something larger, something even more nature centered and more defining for a humanity-within-nature approach. One of the catalysts for this broader thinking is that it will help articulate the North American paradigm into what is happening around the world today. We can no longer constrain our focus to North America, and our discussions of the Model and its relevance could not have come at a better time. We must address biodiversity conservation as a global community, as a global humanity, and as a shared global challenge, considering our species within the context of all others.

There are many paradigms operating on the international conservation front that are of immediate relevance to our efforts here. The idea of *one health* presents us with one great example. The idea of understanding landscapes, species, and human communities as a continuum of ecological visioning and of examining human ecology and human progress as a construct of what emerges from taking care of nature and the landscapes on which we all depend—this is a powerful idea whose time has come. So, too, is the recognition that we must finally deal with, not just talk about, the hard realities of climate change, of floods and droughts, and about the critical issues of human access to nature and a human rights-based approach to ecological practice. Note, however, that all of these challenges may be freely discussed without disparaging the Model or excluding the components of it that are clearly aligned in aspiration and practice. It is true that we can simultaneously seek to improve our future efforts while continuing to celebrate our past successes; indeed, the reality is that we must. In this context, as well, let us also recognize that we are seeing a major emphasis around the world on Indigenous peoples and local communities and the role they must play in any improved conservation ideal. Is this not a topic also reverberating within our North American conservation debates?

I encourage us, therefore, to take away from this invigorating morning a commitment to develop, for the first time, a continental conservation policy—one that is inclusive, that is embracing, and that recognizes the widest range of applicable values. Every human being is a part of the natural world. None of us can stand apart. We are, therefore, also an inseparable component of the ecology of life and death and exist wholly dependent upon the biological systems that have developed across the evolutionary time frames that gave rise to the only planet we can, undeniably, rely upon. And no matter how far we wish to push any conceptual framework, we will never be able to escape the reality that we are immersed in nature. We will, of course, access nature. We will utilize nature. And the only question is: How? With common purpose and with a sense of justice, we can advance towards a better place, rescuing the damaged and marginalized, safeguarding the ecological processes of the earth. And we can do so with every good chance of preserving the natural world and our place within it.

Whatever we take away from here today, let us please remember this: we can have a world with all kinds of fancy models and a world with every kind of wondrous institution and a limitless number of scientific papers being published, but we are living in a world where wildlife is disappearing at an absolutely fearsome rate. And if there is one thing we can safely say about humanity, it is that we've been a big part of the problem. Moving forward, we need to be a bigger part of the solution. We must take care, however, to weave ourselves within nature's fabric and not treat ourselves as governors or gods. We are as much a part of what we aim to conserve as the wilderness that fascinates and continues to motivate us. A little humility can carry us a long way in our discussions of the Model and in finding our way to an expanded vision for nature on this continent and beyond.

Concluding Remarks

Lane Kisonak

In A Sand County Almanac, one of Aldo Leopold's greatest interests was how ethical systems take root and flourish within communities.

Writing in the 1940s, Leopold imagined a future with a "land ethic" prioritizing conservation, which flowed from his lifetime of studying and writing about wild creatures. In looking toward this future, Leopold did what all of us in this room have done, and looked back. Way back. "Only the most superficial student of history," Leopold (1987) wrote, "supposes that Moses 'wrote' the [Ten Commandments]; [they] evolved in the minds of a thinking community, and Moses wrote a tentative summary of [them] for a 'seminar.'" Leopold (1987) said "tentative" because, as he went on to remind us, "evolution never stops."

The Model is a story about our past. And I think it will shape the story of our future. But if rising temperatures, sea levels, habitat loss, changing seasons and weather patterns, and painful losses in biodiversity have by now become inevitable markers of life in the 21st century and beyond, the story of how much we stand to lose is still ours to tell.

To me, the deepest meaning of the Model resides in its first, most ambitious promise—that wildlife resources are conserved and held in trust for all people. When we invoke the Model, we must realize the size of the promise we are making.

I think, in our own ways, we all do. And that highlights an aspect of the Model that sometimes sits in tension with that promise—its tremendous subjectivity.

When some of us confront the size of the Model's promises, we bristle at the Model's grounding in a past marked with as much loss as triumph. Others of us may take faith in the capaciousness of the Model's seven elements despite the narrow lens they train on our nation's history. But all of us agree that we are facing an environmental crisis. I submit that Aldo Leopold might see our struggles over the meaning of the Model as the fitful growth of a land ethic, one that all corners of the conservation community will feel they own. Maybe that ethic will emerge through close collaboration on narrow sets of issues, even as legal, jurisdictional, and philosophical conflicts persist. Maybe the ethic will coalesce only through a victory as grand as passage of the Recovering America's Wildlife Act. I hope that future students of our history, though, will identify an ambitious, universal, collaborative pursuit—between all beneficiaries of the wildlife trust—to secure as much of our biodiversity as our collective knowledge and passion allow.

You will see an announcement soon about one last in-person event for this project—a concluding symposium at The Wildlife Society's 30th Annual Conference in Louisville, Kentucky, this November. And look out for a series of articles from some of the planners and participants for this morning's special session that collect and expand on perspectives shared today.

Finally, thank you to our amazing panel of speakers for being with us today, and thanks to everyone in this room for your interest in the future of the North American Model of Wildlife Conservation. These years of substantive engagement with the Model, both the critiques and defenses, which influence other ongoing debates, can only benefit the essential mission of wildlife conservation.

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